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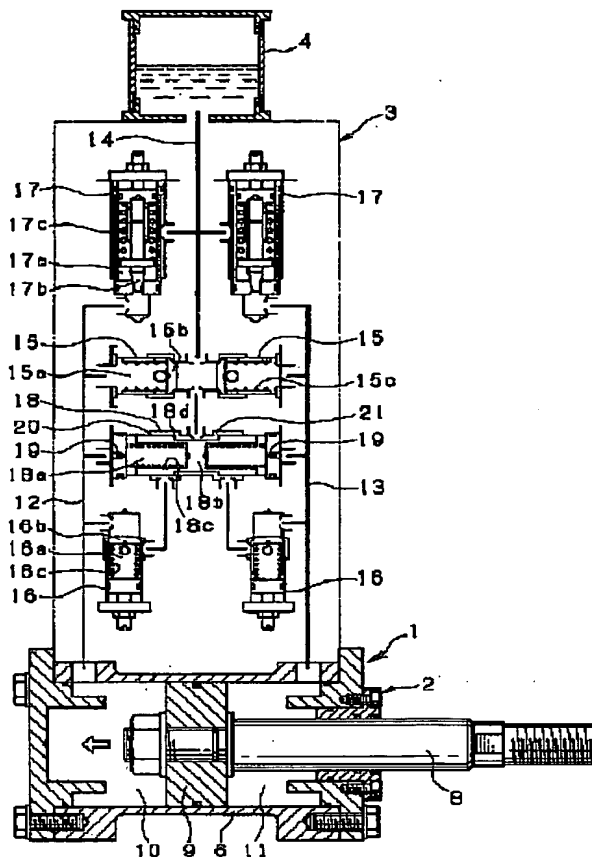
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TITLE : VIBRATION FREQUENCY SENSITIVE
HYDRAULIC DAMPING APPARATUS



ABSTRACT : PROBLEM TO BE SOLVED: To generate attenuation force in a low vibration frequency area including a resonance frequency with a specific vibration frequency being its boundary so as to restrain vibration of a damping object, and reduce attenuation force in a high vibration frequency area so as to insulate vibration.

SOLUTION: A valve unit 3 additionally provided at a hydraulic damping apparatus 1 is provided with an oil suction valve 15, a low attenuation constant pressure valve 16, a high attenuation pressure adjusting valve 17, and a spool valve 18. The oil suction valve 15 opens so as to supply oil from an oil reservoir 4 to a pressure chamber 11, (10) on a negative pressure side due to piston movement. The low attenuation constant pressure valve 16 and the high attenuation pressure adjusting valve 17 are opened by hydraulic pressure of the pressure chamber 10, (11), and the oil is ejected to the oil reservoir 4. The high attenuation pressure adjusting valve 17 applies a greater resistance than the low attenuation constant pressure valve 16 to oil flow. The spool valve 18 switches an oil passage to the oil reservoir 4 via the low attenuation constant pressure valve 16 or the high attenuation pressure adjusting valve 17 according to the high and low vibration frequency areas, and vibration is insulated or attenuated.

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